CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512

DATE: August 16, 2011

**TO:** Interested Parties

**FROM**: Christine Stora, Compliance Project Manager

#### SUBJECT: <u>Sutter Energy Center Project (97-AFC-2C)</u> Staff Analysis of Proposed Modifications to Install the Sutter Grimes Pipeline Biology Supplement

On March 7, 2011, Calpine Corporation filed a petition with the California Energy Commission to amend the Energy Commission Decision for the Sutter Energy Center Project. Staff prepared an analysis of this proposed change and a copy is enclosed for your information and review.

The Sutter Energy Center Project is a 540 MW natural-gas fired combined-cycle power plant located adjacent to Calpine's Greenleaf Unit #1 cogeneration power plant, approximately seven miles southwest of Yuba City, on South Township Road near the intersection with Best Road. The project was certified by the Energy Commission on April 14, 1999, and began commercial operation in July 2001.

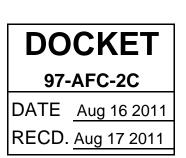
The proposed modifications will allow Calpine to service the Sutter Power Plant with a 2.8-mile, 6 inch natural gas pipeline (referred to as the Grimes Pipeline). This pipeline will allow the project to use natural gas from the Grimes natural gas field in the Sacramento Basin north and west of the project site. The Sutter Energy Center currently receives gas from the Pacific Gas & Electric (PG&E) natural gas transmission system via the 20-inch Sutter Pipeline.

Energy Commission staff reviewed the petition and issued a Staff Analysis on August 11, 2011. On that same day, staff received a copy of the U.S. Army Corps of Engineers (Corps) authorization letter in which the Corps authorized the project owner to conduct work under Nationwide Permit Number 12. In this supplement staff provides changes to and **BIO-11** to ensure that the Conditions of Certification are consistent with the recently issued Nationwide Permit Number 12.

It is staff's opinion that, with the implementation of this additional revised condition, the project will remain in compliance with applicable laws, ordinances, regulations, and standards and that the proposed modifications will not result in a significant adverse direct or cumulative impact to the environment (Title 20, California Code of Regulations, Section 1769).

The amendment petition and staff's analysis has been posted on the Energy Commission's webpage at:

http://www.energy.ca.gov/sitingcases/sutterpower/compliance/index.html



August 16, 2001 Page 2

The Energy Commission's Order (if approved) will also be posted on the webpage. Energy Commission staff intends to recommend approval of the petition at the October 19, 2011, Business Meeting of the Energy Commission. If you have comments on this proposed modification, please submit them to me at the address below prior to September 15, 2011.

Christine Stora, Compliance Project Manager California Energy Commission 1516 9<sup>th</sup> Street, MS-2000 Sacramento, CA 95814

Comments may be submitted by fax to (916) 654-3882, or by e-mail <u>cstora@energy.state.ca.us</u>. If you have any questions, please contact me at (916) 654-4745.

For further information on how to participate in this proceeding, please contact the Energy Commission Public Adviser's Office, at (916) 654-4489, or toll free in California at (800) 822-6228, or by e-mail at <u>publicadviser@energy.state.ca.us</u>. News media inquiries should be directed to the Energy Commission Media Office at (916) 654-4989, or by e-mail at <u>mediaoffice@energy.state.ca.us</u>.

#### SUTTER ENERGY CENTER (97-AFC-2C) Request to Amend Final Commission Decision Biological Resources Staff Analysis Prepared by: Amy Golden August 15, 2011

## INTRODUCTION

On August 11, 2011, staff received a copy of the U.S. Army Corps of Engineers (Corps) authorization letter in which the Corps authorized the project owner to conduct the proposed activities under Nationwide Permit Number 12. The authorization letter contains several conditions including a special permit condition for compensatory mitigation for impacts to jurisdictional waters of the U.S. In order to capture the conditions of this recently issued federal permit, staff has modified text accordingly in the Staff Analysis and **BIO-11**, the condition of certification from the original licensing of the Sutter Energy Center by the Energy Commission that relates to wetland protection and mitigation. Text modifications are noted in red below.

# LAWS, ORDINANCES, REGULATIONS AND STANDARDS (LORS) COMPLIANCE

No additional LORS have been identified since the Staff Analysis was published.

## ANALYSIS

The following changes to the August 2011 Staff Analysis Biology Section are shown in red text below.

#### Biological Resources, page 8, paragraph 3

The project owner submitted the project's wetland delineation map and request for verification to the Corps of Engineers (Corps) on December 20, 2010 (ICF 2011, Appendix F). The Corps issued a preliminary jurisdictional determination for the project on January 12, 2011 and determined that approximately 292.13 acres of wetlands or water bodies in the project area may be jurisdictional waters of the U.S. and may be regulated under Section 404 of the federal Clean Water Act (ICF 2011, Appendix F). The project owner submitted a Preconstruction Notification Form for Nationwide Permit (NWP) 12 to the Corps on January 3, 2011. The Corps issued an authorization letter for the project's proposed activities under Nationwide Permit Number 12 on August 2, 2011 (USACE 2011).

Implementation of revised **BIO-7** (SAA and Biological Opinion Permit Conditions) which requires the implementation of several impact avoidance and minimization measures for state waters will also minimize the potential for impacts to Waters of the U.S. Some of these **BIO-7** measures include: no equipment operation in waterways; confining heavy equipment use to existing roadways; development and implementation of an agency-

approved Frac-out Plan; covering of spoil piles; and use of drip pans under vehicles and other sediment controls. Staff has included a requirement to incorporate all permit conditions in the Corps authorization letter (USACE 2011) for mitigating the project's impacts to Waters of the U.S. under NWP-12 into **BIO-11** (Wetland Protection Measures). Staff has also proposed a new condition, **BIO-7a**, which requires the project owner submit an agency-approved Frac-out Plan to prevent the escape of drilling mud during horizontal drilling activities and identify contingency measures in the event of a frac-out. Additionally, **BIO-12** (BRMIMP) requires that the project owner submit a revised BRMIMP that would include construction impact avoidance measures for jurisdictional waters including long-term monitoring and avoidance measures. With implementation of **BIO-1** through **BIO-4**, **BIO-7**, **BIO-11**, and **BIO-12**, the potential for impacts to federally jurisdictional waters would be reduced to less than significant levels.

## PROPOSED MODIFICATIONS TO CONDITIONS OF CERTIFICATION

The following additions to the Staff Analysis Biology Section are shown in red text below.

Biological Resources, page 21, paragraph 3 insert the following:

- **BIO-11** The project owner shall ensure the following measures are implemented to mitigate or avoid project impacts to wetlands:
  - 1) Provide in-kind replacement habitat at a location acceptable to USFWS for wetlands impacted by the project (BIO-13).
  - 2) Establish an endowment account adequate to provide funds for the perpetual maintenance and management of the replacement habitat.
  - 3) Mark and avoid all wetlands on site that will not be directly taken by the power plant footprint and all wetlands along Hughes Road in the Sutter National Wildlife Refuge.
  - 4) Protect on-site wetlands not taken by the power plant footprint in perpetuity or provide replacement habitat at a location and ratio acceptable to USFWS and establish an endowment account adequate to provide funds for the perpetual maintenance and management of the replacement habitat.
  - 5) Use an air-cooled condenser to eliminate wet cooling tower evaporation and incorporate drains designed to route contaminated runoff away from the remaining wetlands or develop and implement a monitoring program to ensure the wetlands remaining on-site are not degraded by project operations. The program shall include parameters acceptable to USFWS that monitor hydrologic quality and productivity, and identify and defend reference or control wetlands for comparative analysis. If it is determined that the onsite wetlands are being negatively impacted, propose remedial mitigation measures to be implemented. A report presenting the monitoring data and a discussion of the mitigation effectiveness shall be provided annually for the

life of the project. If it can be shown that the wetlands are not being negatively impacted, licensee has the option to request Staff to decrease the frequency or cease monitoring.

- 6) Place a construction cloth over all remaining wetlands located within 500 feet of construction and related roads during construction activities.
- 7) Place the pipeline under or in the shoulder of Hughes Road.
- 8) The project owner shall incorporate all special permit conditions identified in the Corps authorization letter dated August 2, 2011, specifically, the special condition to submit a check for \$1,800.00 to the National Fish and Wildlife Foundation's (NFWF) Sacramento District Wetlands Conservation Fund to mitigate for the loss of 0.012-acre of riparian streambed.

<u>Verification</u>: At least 45 days prior to rough grading, the project owner shall provide to the project CPM for review and approval written documentation (BRMIMP, BIO-12) that the above measures will be accomplished by the licensee and specifying the procedural terms for implementing these measures. The wetland monitoring plan annual report shall be provided to the project CPM no later than July 1 for each year monitoring is completed.

At least 30 days prior to the start of any ground-disturbing activities, the project owner shall provide written verification to the CPM that payment for the loss of riparian streambed was made and received by NFWF.

The project owner shall notify the CPM with a copy to the Corps Sacramento Regulatory Division office of the start and completion dates for each phase of the authorized work 30 days prior to the initiation of construction activities within Waters of the U.S. and 30 days following completion of construction activities. All work activities that occur in Waters of the U.S. shall be described and summarized in each Monthly Compliance Report.

## REFERENCES

USACE 2011 – U.S. Army Corps of Engineers, August 2, 2011. U.S. Army Engineer District, Sacramento. Regulatory Division (ID#SPK-2010-01485).